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Fauna Færøensis.

Ergebnisse einer Reise nach den Färöer, ausgeführt
im Jahre 1912 von ALFONS DAMPF und KURT V. ROSEN.

II. On some Mallophaga in the Kgl. Zoologisches Museum, Königsberg,

being a collection made in the Faroe Islands,
by Dr. A. DAMPF, 1912.

By

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With 6 Figures in the text.

During the summer of 1912, Dr. ALFONS DAMPF, when on a visit to the Faroe Islands, devoted some time to investigating the parasites of birds and mammals.

The Mallophaga taken on this expedition have been submitted to the writer for identification. To one working out the corresponding fauna of so near an area as Shetland this task has been specially interesting. It has also been a great pleasure to handle material, labelled so clearly and with such careful detail as Dr. DAMPF has bestowed on his gatherings.

The collection as received was contained in 14 tubes holding over 500 examples which are referable to 6 genera and 27 species. All the hosts examined (see appended list) occur in typical form or with slight modification (*Corvus corax*; *Sturnus*; *Troglodytes*) in Shetland and Faroe alike. As one might expect, therefore, the

1) Während des Krieges ohne Korrektur durch den Verfasser gedruckt.

parasites of these birds are in both groups of islands practically identical. The *Docophorus* of the Faroe Raven and the *Menopon* of the Faroe Wren are possibly somewhat darker forms than usual, but little stress can be laid on this.

On *Arquatella maritima maritima* (BRÜNN.) Dr. DAMPF collected some immature and barely determinable examples of a *Colpocephalum* — a genus which the writer, in spite of assiduous searching has hitherto failed to find on examples of this host in Shetland. There is nothing however in the collection to show local origin. The same hosts elsewhere would, we believe, yield parasites indistinguishable from those taken in Faroe.

Although Dr. DAMPF found himself hampered as a collector by the law prohibiting the shooting of land birds, it is evident that the examinations he was able to make, were thorough. Thus e. g. he has secured all the species normally found on the Fulmar-Petrel, — not by any means an easy task.

On the arrival of the collection, it was found that the contents of two tubes had become mixed in post. Fortunately it proved a simple matter to separate the insects according to their hosts. In two other cases parasites had evidently occurred on unusual hosts viz. *Docophorus lari* DENNY on *Numenius phaeopus* and *Menopon mesoleucum* NITZSCH on *Larus fuscus*. Both instances of "straggling" would appear to be genuine.

Two tubes were labelled, as regards the host, "Regenpfeifer?". These tubes held a combination of parasites peculiar to *Charadrius hiaticula*, which undoubtedly must have been the host in question.

The arrangement adopted is that of KELLOGG in: WYTSMAN'S "Genera Insectorum", 66me Fascicule, Mallophaga (1908). As a rule only the reference to the original description or first use of the name of a species is given, but in one or two instances later writers are quoted for the sake of more adequate figures or descriptions.

We have given all NITZSCH's species as dating from 1818 — the year in which the Professor of Halle published his classical list in GERMAR'S Magazine. Objection of course may be taken to this since many of NITZSCH's species were represented till 1874 merely by the types in NITZSCH's collection and a name in the list referred to. It is therefore a moot point how far such species should be accepted. In 1874 GIEBEL, who had access to his predecessors collection, published fuller descriptions of the types in his great "Insecta Epizoa". In all cases where NITZSCH's names are used,

references to GIEBEL's work are given. In this we follow KELLOGG who treats GIEBEL's descriptions as the original of the species while crediting the authorship to NITZSCH. With this decision, which has the tacit consent of most students of the order, we personally are in agreement. It is to be hoped that this amicable understanding will continue. All, who have been attracted to the study of this interesting group of insects must, realising their debt to NITZSCH, unite in doing honour to one who has laid the foundations with so sure a hand.

In May 1912 and again in August of the same year the writer was, through the courtesy of the British Museum authorities, permitted to inspect the DENNY collection in S. Kensington, London. Of the notes then made a few bear on some of the species presently recorded. In 1912 however DENNY's types were not in a condition to make accurate critical work possible. More recently they have been mounted in balsam and can now be more satisfactorily examined. It seemed advisable therefore to check the notes made last year but this the writer was unable to do personally. His best thanks are due to Mr. BRUCE J. CUMMINGS of the British Museum Staff for his kindness in answering questions bearing on the DENNY Collection and in comparing Dr. DAMPF's Raven *Docophorus* with DENNY's types. Mr. CUMMING's conclusions with regard to *D. semisignatus* are in harmony with those of the writer. We are inclined therefore all the more strongly to believe that *Corvus corax* and its many subspecies harbour only one form of *Docophorus*. But though a few suggestions are offered in particular instances, no attempt has been made to treat the synonymy of the species now noticed exhaustively. Nor has it seemed necessary to multiply bibliographical references, as might easily have been done.

The following is a list of host birds examined by Dr. DAMPF with note of the parasites obtained under each species.

List of Hosts with Parasites.

An asterisk denotes that the species in question is a "straggler".

<i>Troglodytes troglodytes borealis</i>	<i>Docophorus troglodytis</i> n. sp.?
	<i>Menopon troglodyti</i> D.
<i>Sturnus vulgaris faroensis</i>	<i>D. leontodon</i> D.
	<i>Menopon</i> sp.
<i>Corvus corax varius</i>	<i>D. semisignatus</i> N.? et D.
	<i>Nirmus varius</i> N.
	<i>M. gonophaeum</i> G.

<i>Corvus cornix cornix</i>	<i>D. ocellatus</i> N.
	<i>M. mesoleucum</i> N.
<i>Branta bernicla bernicla</i>	<i>Lipeurus temporalis</i> N.
<i>Charadrius hiaticula</i> , "Regenpfeifer?"	<i>N. hiaticulae</i> D.
	<i>Nirmus</i> sp.
	<i>Colpocephalum</i> sp.
<i>Haematopus ostralegus ostralegus</i>	<i>D. ostralegi</i> D.
	<i>N. ochropygus</i> N.
	<i>C. grandiceps</i> P.
	<i>M. crocatum</i> N.
<i>Arquatella maritima maritima</i>	<i>D. fusiformis</i> D.
	<i>N. zonarius</i> N.
	<i>C. umbrinum</i> P.
<i>Numenius phaeopus phaeopus</i>	<i>D. humeralis</i> D.
	* <i>D. lari</i> D.
	<i>N. phaeopi</i> D.
	<i>M. crocatum</i> N.
<i>Larus</i> sp. juv.	<i>D. lari</i> D.
<i>Larus fuscus fuscus</i>	<i>D. lari</i> D.
	* <i>M. mesoleucum</i> N.
<i>Fulmarus glacialis glacialis</i>	<i>D. occidentalis</i> KELLOGG
	<i>L. mutabilis</i> P.
	<i>M. numerosum</i> KELLOGG
	<i>Ancistrana gigas</i> P.

In the above list 3 species are not fully determined — their identity is discussed later. We do not think that much dubiety attaches to the *Nirmus* of *Charadrius hiaticula* which can hardly be more than a variety of *boeophilus* KELLOGG. But we have mean while given expression to the shade of hesitation we feel. The uncertain *Liotheids* are on a different footing. One might easily suggest names were it not for the suspicion that in both cases these names cover more than one form.

It is presently often difficult to know what precisely is intended by a name in a list of *Mallophaga*. Thus for example we have recently seen "*Nirmus obscurus* DENNY" recorded, without remark. It is safe to say that (without actual reference to the type) "*Nirmus obscurus* DENNY" is purely of private interpretation. For this reason we have attempted to indicate what we have had before us in cases where doubt might arise.

Ord. Mallophaga.

Subord. Ischnocera.

Fam. Philopteridae.

Gen. *Docophorus* NITZSCH.*Docophorus fusiformis* DENNY (1842).

D. fusiformis DENNY, Monogr. Anopl. Brit., p. 84, tab. 1, fig. 2 (1842).

— PIAGET, Les Pédiculines, p. 86, tab. 6, fig. 7 (1880).

— KELLOGG, New Mallophaga III, p. 58, tab. 5, fig. 3 (1899).

6 immature examples on *Arquatella maritima*.

Gjanoyri (Strömö) 15./8. 1912. K. SCHREIBER leg.

Not uncommon on *Tringa* sp.; recognisable even at an early stage by the head. The adult clypeal outline varies considerably. Generally it is concave but sometimes almost straight. PIAGET figures the ♀, KELLOGG the ♂.

Docophorus humeralis DENNY (1842).

D. humeralis DENNY, Monogr. Anopl. Brit., p. 88, tab. 5, fig. 7 (1842).

3 ♂♂, 5 ♀♀, 6 imm. on *Numenius phaeopus*.

Grönhölm b. Strömnaes (Strömö) 12./8. 1912. SCHREIBER leg.

This beautiful form occurs also on *Numenius arquata*. Its nearest ally is, we consider, *D. cordiceps* PIAGET (1880), but *humeralis* is much the larger insect. We figure for comparison the male genitalia of both forms. PIAGET has already (Les Pédiculines, tab. 6, fig. 2a, 2b) drawn the apparatus of *cordiceps* but not on a sufficiently large scale to show the points of difference.

These points may be briefly indicated:

1. The apparatus of *humeralis* is absolutely much larger than that of *cordiceps*.

2. The paramers are gently bent and broad in *humeralis*, narrower and more abruptly bent in *cordiceps*.

3. The endomers are together quadrate with a delicate tooth on the distal edge of each (*humeralis*) but in *cordiceps* more narrowly quadrate with the outer distal angle as it were cut off.

4. The ventral hair placed in *humeralis* nearer the apex of the paramer than in *cordiceps*, is probably a constant feature.

These genitalia belong to a primitive (?) and well defined type which consists of 9 parts, 3 paired + 3 single. The "basal-plate", the "paramera" and the "penis" are already separately named. We have used here in addition three terms, endomer,

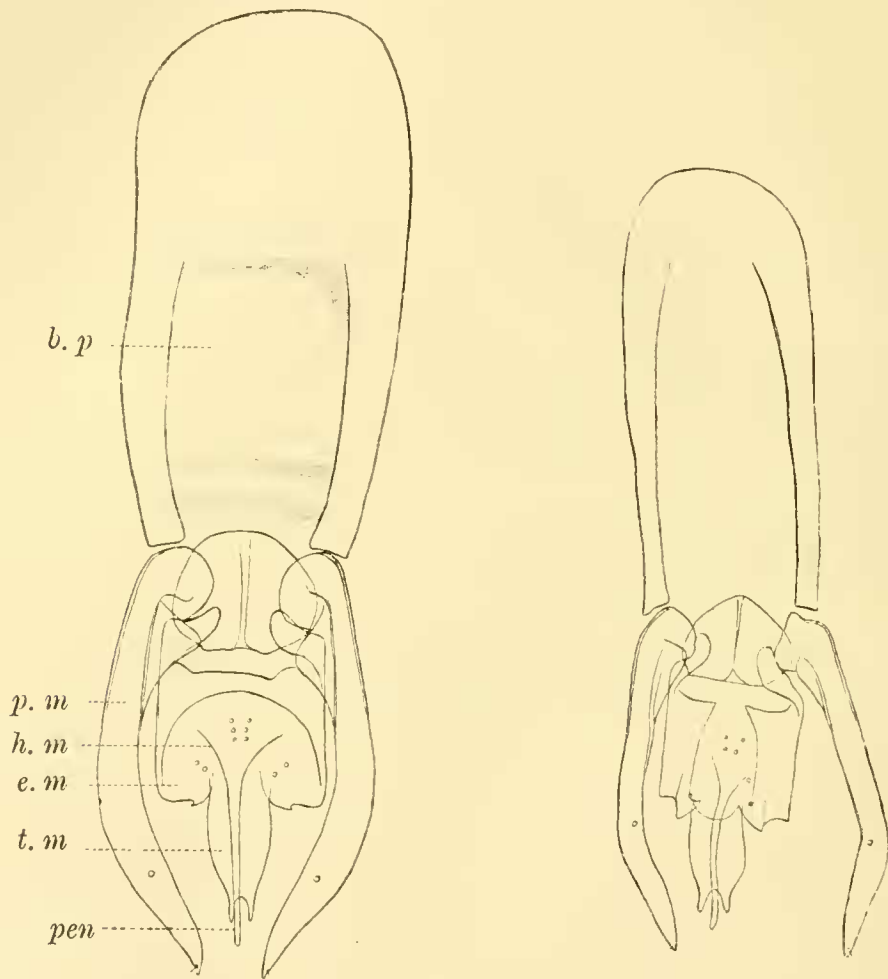


Fig. A.

Fig. B.

Fig. A. Male genitalia of *Docophorus humeralis* DENNY (from above).

Fig. B. Male genitalia of *Docophorus cordiceps* PIAGET (from above).

t tergite. *b. p* basal plate. *p. m* parameron. *e. m* endomeron. *st* sternite.
t. m telomeron. *h. m* hypomeron. *pen* penis.

telomer, hypomer, which should be self-explaining. The endomers are so closely associated as to be practically one bilaterally symmetrical piece. The telomers as a rule are independent but sometimes (as above) appear almost fused. We have not yet found the single process (hypomer) beneath the penis at the level of the posterior edge of the endomers, of much taxonomic value by

itself. Its outline indeed is hard to discern but it frequently modifies in a very characteristic manner the appearance of the proximal end of the penis. Seen from above they cannot be separated — the penis appearing to have a basal enlargement.

***Docophorus lari* DENNY (1842).**

D. lari DENNY, Monogr. Anopl. Brit., p. 89, tab. 5, fig. 9 (1842).

— PIAGET, Les Pédiculines, p. 111, tab. 9, fig. 7 (1880).

2 ♂♂, 2 ♀♀, *Larus fuscus*, Gjanoyri (Strömö) 5./8. 1912. K. SCHREIBER leg.

3 ♂♂, 5 ♀♀, *Larus sp. juv.*, ibid. 19./8. 1912. K. SCHREIBER leg.
♀ (straggler) *Numenius phaeopus*, Grönhölm b. Strömnaes (Strömö) 12./8. 1912. K. SCHREIBER leg.

A cosmopolitan species on Gulls and sea-birds. In Shetland the writer takes it on 6 species of *Larus*.

***Docophorus leontodon* NITZSCH (1818).**

D. leontodon NITZSCH, in: GIEBEL, Ins. Epiz., p. 90, tab. 2, figs. 4, 7 (1874).

11 ♂♂, 12 ♀♀, imm. *Sturnus vulgaris faroensis*, 2 Expl., Gjanoyri (Strömö) 10/8. 1912. SCHREIBER leg.

***Docophorus occidentalis* KELLOGG (1896).**

D. occidentalis KELLOGG, New Mallophaga I, p. 88, tab. 3, fig. 7 (1896).

♀ *Fulmarus glacialis*, Gjanoyri (Strömö) 11./8. 1912. K. SCHREIBER leg.

This species, abundant on Fulmars of the Pacific Coast, occurs, but never numerously, on *F. glacialis* in Shetland. The structure of the head, the abdominal fasciae and the male genitalia indicate, we consider, affinity with the *celedoxus* group of Auk *Docophorus*.

***Docophorus ocellatus* NITZSCH (1818).**

D. ocellatus NITZSCH, in: GIEBEL, Ins. Epiz., p. 81, tab. 9, fig. 7, 8 (1874).

3 ♀♀, 6 imm. *Corvus cornix*, Naalsö, 18./9. 1912. PETERSEN leg.

Docophorus ostralegi DENNY (1842).

D. ostralegi DENNY, Monogr. Anopl. Brit., p. 74, tab. 5, fig. 4 (1842).

D. acanthus GIEBEL, Ins. Epiz., p. 101 (1874).

— PIAGET, Les Pédiculines, p. 84, tab. 6, fig. 6 (1880).

3 ♂♂, 2 ♀♀, 4 imm. *Haematopus ostralegus*, 3 Expl., Langesand, Gjanoyri, Strömnæs 3., 13., 15./8. 1812. K. SCHREIBER leg.

Within the genus *Docophorus* the species found on *Limosa*, *Haematopus*, *Larus*, *Squatarola* etc. form a compact group of which no member is more distinct than the parasite of the oystercatcher (*H. ostralegus*). GIEBEL's *D. acanthus* refers unquestionably to DENNY's insect. PIAGET rejects the name *ostralegi*, presumably because it is founded on that of the host. He also considers that *D. naumanni* GIEBEL is a synonym of the *acanthus* of that author. Neither decision can, we think, stand. The first is plainly arbitrary, as regards the second we can only say that the *Docophorus* which is normally attached to the Grey Plover is very different from *D. ostralegi* D. No doubt there is a strong superficial resemblance but this remark would apply to all the group "Latitemporales" of PIAGET.

Docophorus semisignatus NITZSCH (1818).

D. semisignatus NITZSCH, in: GIEBEL, Ins. Epiz., p. 80, tab. 9, figs. 9 and 14 (1874).

— DENNY, Monogr. Anopl. Brit., p. 66, tab. 1, fig. 5 (1842).

In his well known list (in: GERMAR's Magazine, Vol. 3, p. 261 et seq.) NITZSCH (1818) gave the *Docophorus* infesting the Raven the name *semisignatus* and in 1874, GIEBEL (l. c.) who had access to NITZSCH's types, published a description with figures of this insect.

In the interim a *D. semisignatus* had been reported from *Corvus corax* first by BURMEISTER (Handbuch, Abt. 2, pt. 2, p. 424) in 1839, and again by DENNY (l. c.) in 1842.

PIAGET, however, (Les Pédiculines p. 148) in 1880 without apparently having seen either NITZSCH's types or fresh specimens of *Docophorus* from Raven decided that *semisignatus* N. is not a good species but only a variety of *D. atratus* N. or *D. ocellatus* N. At the same time he described a new species, *D. albidus*, from *Corvus scapulatus*.

We have dealt with this matter elsewhere (in: Trans. Perthshire Soc. nat. Sc., Vol. 5, pt. 4, p. 126—127, 1912) and have as yet seen no reason to alter the conclusions there reached viz.:

a) That the *D. semisignatus* of DENNY's monograph is a valid species, distinct from the species of *Docophorus* found on *Corvus cornix* and *C. corone*, *C. frugilegus* and *C. monedula*.

The "DENNY" Collection contains under "*semisignatus*" the following:

1. 3 specimens labelled "*coracis*" in the writing of ADAM WHITE (teste C. J. GAHAN).

2. 5 examples in DENNY's own name.

3. 3 examples from STEPHEN's Collection.

These 11 examples represent one species, that viz. which we have always found on the Raven. DENNY believed this form to be NITZSCH's species. In this we think him right in spite of what PIAGET has written. But should PIAGET prove to be correct — (a remote contingency possible only if GIEBEL had not the true *Docophorus* of the Raven before him) — the name *semisignatus* must even then figure on our lists with DENNY as author.

b) We also consider that PIAGET had good reason to hesitate before describing his *Docophorus albidus* from *Corvus scapulatus* as both description and figure (Les Pédiculines, p. 48, tab. 3, fig. 6), apply exactly to paler examples of the Raven parasite.

In connection with the whole question Dr. DAMPF's Faroe material is of great interest.

From 3 examples of *Corvus corax varius* a long series of *Docophorus* was secured.

These may be grouped as follows:

- | | |
|------------------------------|--|
| 1. a) 4 ♂♂, 7 ♀♀, 26 imm. | } Gjanoyri (Strömö) 16. and 17./9. 1912. K. SCHREIBER leg., 2 birds, parasites in one tube originally. |
| 2. b) 18 ♂♂, 30 ♀♀, 193 imm. | |
| c) 26 ♂♂, 15 ♀♀, 15 imm. | |
- Naalsö 18.9.1912. PETERSEN leg.

We have separated a) from b) with some hesitation and without suggesting that they came from the birds shot on the 16. and 17. respectively. Lot a) are distinctly paler than lots b) and c) which agree completely. They i. e. a) are typical examples of *albidus* or *semisignatus*. Possibly a) and b) and c) represent one form

a) consisting of individuals which have recently passed through a moult. If so the colours must take some time to establish themselves for in (a) the jaws are dark and sometimes closed round feather fibres.

Lots b) and c) are strikingly dark for *semisignatus*. Spots or markings normally outlined merely or broadly edged with black

have become almost uniformly darkened save for the presence of colourless pustules or a spiracle. In series of typical *semisignatus* from Perthshire; Forfarshire; Rossshire; and Shetland we have only once seen a specimen similar to these Faroe examples. Yet they seem darker.

Professor KELLOGG (New Mallophaga II, p. 477, tab. 65, fig. 5, 1896) described from *Corvus corax sinuatus* a *Docophorus distinctus* which has since been reported from *C. corax principalis*. Beyond the extremely dark markings, we cannot see any good character to separate KELLOGG's species from *semisignatus*.

We had just put these notes into shape when through the kindness of Captain HEDDLE, Grangemouth, we had an opportunity of collecting *D. semisignatus* from a Raven shot at Ronas Voe 11./8. 1913, also through the courtesy of Captain JENSSEN, Manager of the Alexandre Whaling Station Collafirth, we secured *Docophorus* from another Raven shot near the station, 1./9. 1913. Collafirth and Ronas Voe are in the neighbourhood of Ollaberry. The Ronas Voe bird was a young one of the year — a large specimen, while the Collafirth example was an adult — ♀? — smaller than any Shetland Raven we have seen. To our delight both lots of *Docophorus* taken are quite comparable with the dark Faroe material. The only other Shetland examples of *semisignatus* we possess agree with our Scottish material. Here mean time we must leave the matter. Apparently *D. semisignatus* N., *D. albidus* P., and *D. distinctus* KELLOGG represent one species. We should call Dr. DAMPF's lots b) and c) and the Shetland examples just referred to, *distinctus* KELLOGG. But whether *distinctus* is a geographical or a host or racial variety or merely a very intensely marked phase of the adult Raven *Docophorus* we cannot say. The best character for *D. semisignatus* — apart from the male genitalia — would appear to be the peculiar signature with its well defined frontal margin and posterior (apical) clear region. In *distinctus* the occipital bands stand brilliantly out and the edge of the metathorax is plainly darkened. KELLOGG has already noted these points. But colour distinctions are so uncertain as to be by themselves of no specific value. Too much stress also may easily be laid on the presence or absence of "pustules incolorées".

The majority of the stronger elements of the chaetotaxy have probably a sensory connection. In any case the chitin of the area on which they stand seems thinner. In a little coloured form like

albidus P., the 'pustule' will not shew against the prevailing white of the background, but whenever this is darkened the 'pustule' becomes evident (*semisignatus*) or very pronounced as in the examples from Faroe.

Docophorus troglodytis n. sp.? DENNY?

Along with *Menopon*, Dr. DAMPF took on *Troglodytes borealis* a single immature example of the peculiar *Docophorus* found on the Wren. With this insect we have been long familiar from the Shetland variety of the host. In 1912 we noted it in the DENNY collection (3 examples with the name "*troglodytis*" merely marked at the side) but its position there suggested that it was not in the original collection and DENNY himself has described nothing like the present insect. On being appealed to Mr. CUMMINGS writes that there is no M.S. name for this form in the DENNY Collection which contains three examples (two headless) now mounted separately. They are labelled simply "*troglodytis*".

We have hesitated hitherto to describe the Wren *Docophorus* because of its strongly Nirmoid facies and also because *Nirmus gulosus* N. has been recorded from Wren. We imagine that *gulosus* is really a *Docophorus* very close to the insect now under discussion. Mr. CUMMINGS has kindly forwarded NITZSCH's original description from the "Zeitschrift für die gesammten Naturwissenschaften", 1866, p. 117, as follows; "*N. albidus prora flavescenti, pictura praeter limbum marginalem nulla. Capite cordato-triangulari postica prothorace triplalatiore, fronte truncato obtuso; abdominis elliptici pilosi sulco dorsali nullo. Habitat in Certhia familiari*".

GIEBEL Ins. Epiz. p. 140 adds "Die beträchtliche Breite des herzförmigen Kopfes und dessen gerade abgestutztes Vorderende genügen schon, diese Art von allen vorigen der Singvögel zu unterscheiden".

PIAGET (Les Pédiculines p. 162) further quotes GIEBEL to the effect that *N. gulosus* has three hairs at the side of the clypeus while the 5th antennal joint equals the 4th.

Now in the wren *Docophorus* the head is in both sexes distinctly longer than broad; the anterior edge of the clypeus is definitely concave and there are some half dozen hairs at the side of the forehead though the most anterior are not conspicuous. The 4th antennal joint is much shorter than the 5th. The head is at most only twice the breadth of the prothorax. Therefore we prefer at

present to use a distinctive name for the *Docophorus* of the wren although we are strongly inclined to believe that the insect now described has been recorded already as *Nirmus gulosus* N.

D. troglodytis shows a number of special features. To draw attention to these indeed is one of the objects of the subjoined detailed account. The chaetotaxy of the head, the male genitalia, the arcuate arrangement of the hairs placed in the middle of the abdominal segments and not near the posterior edge, as well as the faint transverse anteriorly eroded blotches, will ultimately, we imagine, warrant the erection of a new genus for the reception of this insect. The occipital bands also, so far as they can be made out, converging anteriorly, are not of a usual type. We have seen a similar form from a Passerine host (in South Africa) and believe that *D. mironotatus* KELLOGG (New Mallophaga, pt. 3, p. 65, tab. 5, fig. 6, 1899) also comes close to it.

Head.

♂. Clypeus. Narrowed rather abruptly between the antennae and the suture, thence with sides gently sloped toward one another. Anterior edge concave with rounded angles. Clypeal bands near suture with parallel sides, narrow and tapered in front. Almost at anterior end of band 2 short hairs on dorsal surface, and behind, from below another short hair which barely projects at edge, short hair at suture, another showing at its side occasionally the tip of a long fine hair rising from the middle of the undersurface of the head. In front of suture, between band and signature there is an erect hair on each side. Apparently in anterior portion of signature but rising from below two short hairs.

The antennal bands, like those of the clypeus, narrow with parallel sides rise at the middle of the insertion of the first antennal joint and have no connection with the oculars save along the thickened edge of the head. In their anterior portion between the suture and the trabecula 2 short hairs from below. One minute hair before trabecula.

Signature large; faintly defined. Anterior edge concave. Thereafter the signature contracts, expanding again to its maximum near the level of the suture. Its narrow apex lies obscurely behind the mandibles. Just in front of the mandibles the signature bears a short stiff hair on each side.

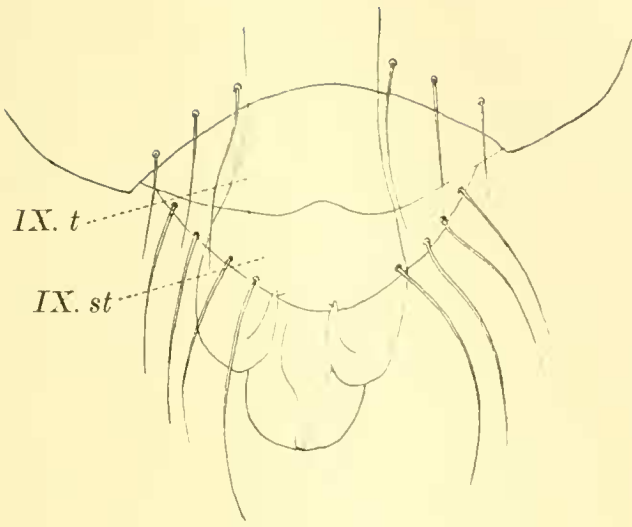


Fig. C.



Fig. D.

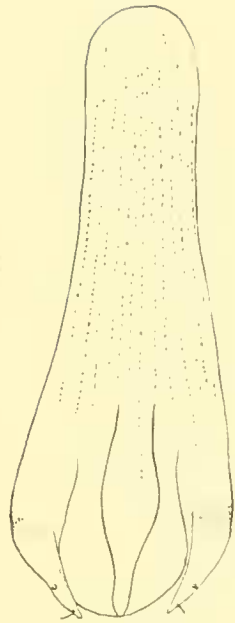


Fig. E.

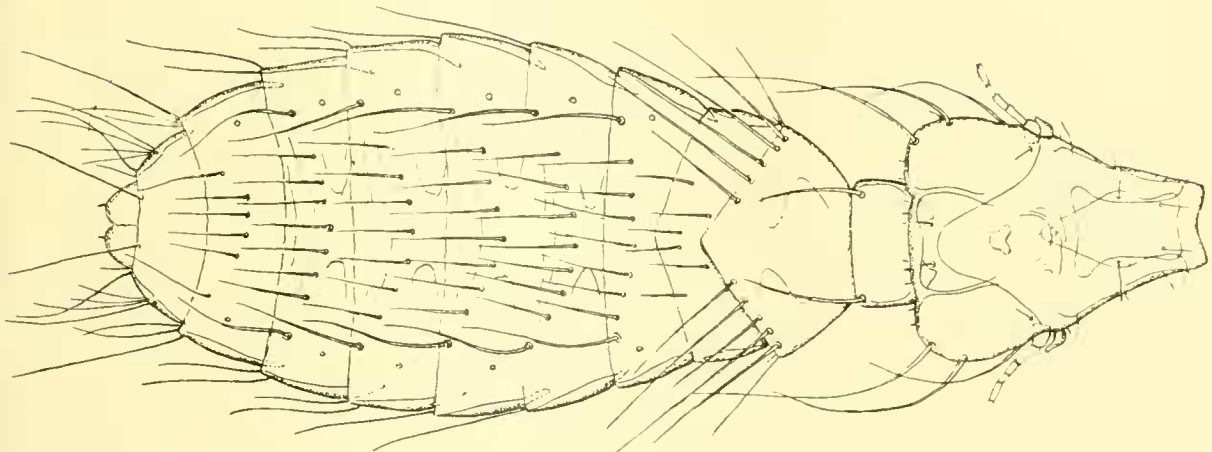


Fig. F.

Fig. C. Terminal segments of *Docophorus troglodytis* ♂, from above, showing exserted genitalia with the paramera upwardly reflexed.

Fig. D. Tip of parameron of male genitalia *D. troglodytis* (highly magnified).

Fig. E. Male genitalia *D. troglodytis* disserted to show relative lengths of parts.

Fig. F. *D. troglodytis*. The faint abdominal and thoracic marks are outlined only. The legs are not drawn.

The posterior region of the head, save at the margin is remarkably bare behind the antennae. There is a short stiff hair near the edge opposite the base of the antennae. Following the line of this hair one comes to two extremely minute prickles on each side

of the median line of the head. There is the usual pair of short hairs before the occiput.

Antennae. 1st joint short, hardly so long as the trabecula which is basally swollen and tapered distally. 2nd joint slightly longer than 1st, 3rd shorter than 2nd, 4th very short, 5th about equal to 3rd. The ocular band is very short. The eye is small giving rise to a long curved hair. The temples are evenly rounded and bear two long pustulated hairs and three extremely short bristles before the occiput. Occiput bare with broad band marginally, convex in outline though slightly overhung by the temples. The occipital bands, ill defined anteriorly, appear to converge on the base of the mandibles.

The margin of the head generally is incrassated, being thinnest at the temporal angle.

Thorax.

Prothorax set deeply in the head, bare save for the usual long hair at the posterior angle. Hidden below the occipital margin however are 6 (3, 3) very short prickles or spines.

Metathorax bare, strongly pointed over the abdomen, sides divergent. At the postero-lateral angle a very short spine and 6 longish pustulated hairs of unequal thickness on each posterior edge. The apex is bare, chitinous ribs appear between the coxae. The mesosternum bears 2 hairs and the metasternum 4.

Abdomen.

Shape, elongated, 1st segment with subparallel or slightly divergent sides. Its posterior edge is not quite transverse but might be almost described as angled over the second. 4th segment broadest. The 9th sternite is well developed. The lateral bands are narrow and pointed anteriorly. They enter the segment in front for some distance.

Chaetotaxy. 1st segment with 6 hairs rising from small pustules end arranged a) 2 apart — one on each side of metathoracic apex, b) 2 approximated in the middle of the segment and c) 2 widely apart near posterior edge. Segments 2—6 bear on each side one long hair on large pustule below the stigma. These segments also bear a curved median row of hairs as follows. 2nd has 8; 3rd has 7—8; 4th has 6—7; 5th has 5—7; 6th has 4. The 7th segment

bears 2 median hairs and the 8th bears 6, placed 3,3 about the median line. The 9th tergite bears 2 minute hairs.

At the sides of the segments the angles bear no hairs on segments 1 and 2. Segments 3 and 4 have 1 each. Segments 5 and 6, have 2, while segments 7 and 8 bear 3. Segment 9 bears 8 long hairs (4,4).

On the ventral surface the 1st sternite bears 6 hairs, sternites 2—5 bear 8—12 hairs. Sternite 6 has 2. The 4th and 8th are bare. The 9th bears two short hairs on the upper surface (where it underlaps the tergites) and two short hairs below — the latter accompanied by two minuter hairs at the side. In all the 9th sternite (taking both aspects and sides) bears 14 hairs.

The legs are somewhat long.

The genital mark is too indistinct for accurate delineation. The genitalia consist of two lateral unhinged paramera bearing a distinct terminal hair and a central straight penis attached below a short rounded plate which does not exceed the paramera. The paramera though apparently fused to the short broad basal plate can be upwardly reflexed.

♀. In facies and chaetotaxy like the ♂ but differing in the following respects.

Abdomen. Tergites 2—6 have long hair below the stigma and 6—7 medianly. Tergite 7 bears 4 median hairs (cf. ♂) and one at each side.

The 8th segment bears 3 hairs at the middle of each side and 2 hairs at postero-lateral angle. There is also 1 hair on each side near the angle at the posterior edge. The 9th segment is bare on both aspects save for a tiny terminal prickle on each lobe.

In the ♂ sternite 7 and 8 are bare but in the ♀ sternite 6 as well is similarly without hairs. The bare area however is set with one or two minute prickles. The vulva is convex, thickly set at the edge with short hairs.

The genital mark consists of two elongated sub-triangular patches on segments 8 and 9. Their inner edges are parallel. The base of the triangle is the outer edge of segment 9.

The general colour in both sexes is whitish yellow. The bands and chitinized regions being darker. The margin of the abdomen is generally sharply defined. The abdominal markings vary with age. In young mature specimens they may be absent though the genitalia are developed. In older examples there is, especially on

the posterior segments 4—6 an indefinite band which is incomplete medianly, darker posteriorly and never reaching the sides. This is best seen in an old ♂. In the ♀ the coloured tergites show a darkened posterior margin and at the anterior edge a short dark patch on each side of the median line. These patches obscurely fuse with the markings of the posterior margin, but this three spotted appearance — is for the ♀ characteristic.

The affinities of this species are more obviously with such types as *D. serrilimbus* N. (*Iynx torquilla*) and *D. fallax* (*Kitta thalassina*) than with any of the *D. communis* group. More remotely it is connected with *D. superciliosus* (*Dendrocopus*).

D. communis has been reported more than once from *Troglodytes* but it is unlikely that the present insect has been so referred to. We have seen a single immature *Docophorus* from wren which is possibly to be assigned to the *communis* type. If so it is probably an instance of straggling. *D. troglodytis* on the other hand is invariably to be found on *Troglodytes* in its various races. We have seen it now from this host from E. Prussia, England?, Shetland, and Faroe. The present notes are based on Shetland material, as Dr. DAMPF's single example is too immature for description.

Measurements of *D. troglodytis* (in mm).

	♂		♀	
	length	breadth	length	breadth
Head	0,414	0,371	0,471	0,407
prothorax	0,107	0,214	0,114	0,228
metathorax	0,185	0,328	0,192	0,371
abdomen	0,542	—	0,907	—
	to			
	0,628			
4th segment	—	0,471	—	0,585
Total	1,24—1,33	—	1,6	—
Antennae				
1st joint	0,050	0,040	0,040	0,036
2nd	0,046	0,030	0,043	0,026
3rd	0,030	0,026	0,030	0,026
4th	0,016	0,026	0,020	0,023
5th	0,036	0,023	0,033	0,023

In a series the head and thoracic measurements seem fairly constant for both sexes. The length of the male abdomen is slightly variable as the figures show, but where the abdomen is shorter, full development has probably not been attained though the genitalia are formed.

Gen. *Nirmus* NITZSCH (1818).

Nirmus hiaticulae DENNY (1842).

N. hiaticulae DENNY, Monogr. Anopl. Brit., p. 136, tab. 11, fig. 10 (1842).

2 ♀♀. “? Regenpfeifer” (*Charadrius hiaticula*).

Gjanoyri, Aug. 1912. K. SCHREIBER leg.

N. hiaticulae D. is possibly a synonym of *N. bicuspis* N. from *Charadrius dubius* but the species of the section “bicuspidati” of this genus require careful discrimination and at present it seems safer to retain DENNY’s name.

Nirmus ochropygus NITZSCH (1818).

N. ochropygus NITZSCH, in: GIEBEL, Ins. Epiz., p. 160, tab. 5, figs. 5 and 6 (1874).

3 ♂♂, 2 ♀♀. *Haematopus ostralegus* (3 expl.).

Langesand, Gjanoyri. Strömnæs, 3., 13., 15./8. 1912. K. SCHREIBER leg.

Nirmus phaeopi DENNY (1842).

N. phaeopi DENNY, Monogr. Anopl. Brit., p. 144, tab. 10, figs. 6, 7 (1842).

♂, 4 ♀♀. *Numenius phaeopus*.

Grönhölm b. Strömnæs (Strömö), 12./8. 1912. SCHREIBER leg.

On various waders e. g. *Tringa* spp.; *Streptilas*, *Limosa*; *Machetes* and *Numenius* as regular hosts and occasionally on *Totanus* etc. There occurs a series of *Nirmus* of the general type *holophaeus* NITZSCH (described from *Machetes*). These forms are extremely similar in external facies. Dissection reveals minute differences in the male genitalia while there is considerable variation in size. The colour also varies in intensity.

A smaller, a medium, and a large size respectively may be recognised in this series.

The small form which has the largest range of host may be *subcingulatus* NITZSCH, while *actophilus* KELLOGG et CHAPMAN appears to refer to the same insect. We have seen the medium form only from *Limosa* and assume here that it corresponds to true *holophaeus* NITZSCH. This however is not beyond question. On *Numenius* occur the largest exponents of the series and there can be little doubt that DENNY signalised this large type in his *N. numenii* (*Numenius arquata*) and *N. phaeopi* (*Numenius phaeopus*). It is almost equally certain that PIAGET'S *inaequalis* (*Numenius arquata*) is the form DENNY called *numenii*. This being so the new name would appear to be unjustified.

These *Nirmus* parasites of *Numenius arquatus* and *Numenius phaeopus* are very close to one another. But examples from the curlew (*N. arquata*) are 1. uniformly darker, 2. generally more robust and 3. in the male genitalia slightly different from the corresponding form on the whimbrel (*N. phaeopus*). But we have seen too few ♂♂ from the latter host to venture a decided opinion, nor is this the place to enter minutely into a discussion of the value to be attached to such differences as have been mentioned above. We note them in the present connection merely to explain our preference for the name *phaeopi*, which DENNY applied to the paler insect. In view of these notes the following references are given.

N. subcingulatus NITZSCH, in: GIEBEL, Ins. Epiz., p. 158 (1874).

N. holophaeus NITZSCH, in: GIEBEL, Ins. Epiz., p. 158, tab. 5, fig. 1 (1874).

N. numenii DENNY, Monogr. Anopl. Brit., p. 144, tab. 9, fig. 6 (1842).

N. inaequalis PIAGET, Les Pédiculines, p. 176, tab. 15, fig. 1 (1880).

N. actophilus KELLOGG and CHAPMAN, New Mallophaga, pt. 3, p. 78, tab. 6, fig. 4 (1899).

Nirmus varius NITZSCH (1818).

N. varius NITZSCH, in: GIEBEL, Ins. Epiz., p. 130, tab. 7, figs. 2, 3 (1874).

One example very immature. *Corvus corax* (2 expl.).

Gjanoyri, Strömö, 16., 17. 9. 1912. K. SCHREIBER leg.

Nirmus zonarius NITZSCH (1818).

N. zonarius NITZSCH, in: GIEBEL, Ins. Epiz., p. 166 (1874).

♀. *Arquatella maritima*.

Gjanoyri (Strömö), 15/8. 1912. K. SCHREIBER leg.

This species affects the genus *Tringa* and other small waders e. g. *Streptopelia*; *Calidris* etc. We have seen it also from "*Aegialitis*" and *Alca* — probably a straggler in both instances.

Nirmus sp.

♂. "Regenpfeifer?" (*Charadrius hiaticula*), Aug. 1912.

Gjanoyri. K. SCHREIBER leg.

The most interesting *Nirmus* of the collection, remarkably long and Lipeuroid in appearance.

PIAGET (Les Pédiculines. p. 175, tab. 14, fig. 9, 1880) describes and figures a very narrow *Nirmus bicolor* from *Vanellus vulgaris* and gives *Phalaropus lobatus* as a second host remarking only that the parasite of *Phalaropus* is "un peu plus long". To *Nirmus bicolor* EVANS ascribes specimens identical with Dr. DAMPE's ♂, taken on *Charadrius hiaticula* in the "Forth" Area, Scotland (in: Trans. and Proc. Roy. phys. Soc. Edinburgh, Vol. 18, No. 4, p. 272 (1912).

We have known this *Nirmus* now for three years and believe that, so far as Scotland is concerned, it is peculiar to *Charadrius hiaticula*. The determination, *N. bicolor* P., does not satisfy us but this *Nirmus* agrees almost perfectly with *N. boophilus* KELLOGG (*Oxyechus vociferus*) (New Mallophaga, pt. 1, p. 107, tab. 5, fig. 7, 1896) differing only in the presence of a long reflexed hair in the eye. Such a difference of real would be important but hairs are easily detached and this may well have happened to the unique ♀ on which KELLOGG bases his species.

N. boophilus also impresses one with its Lipeuroid facies for KELLOGG remarks: "PACKARD's outline figure and incomplete description of *Lipeurus gracilis*, host? (in: Amer. Natural., Vol. 4, p. 95, tab. 1, fig. 6, 1870) must refer to a form resembling in shape and markings at least this species."

We believe we have seen specimens of this insect taken long before 1870, and it is our impression that PIAGET may have had it before him also. For in discussing the hosts of *Lipeurus baculus* N. he remarks: "J'ai trouvé des femelles égarées sur une *Sula alba*; sur un *Totanus glottis*; et sur un *Charadrius minor*, seulement dans le dernier cas les appendices du clypéus manquaient, le dernier segment avait les lobes plus aigus et les dimensions étaient moindres ($17\frac{1}{2}$)" (Les Pédiculines, p. 305, 1880). Evidently PIAGET felt some

slight difficulty in naming the ♀ from *Charadrius minor* (= *dubius*), *L. baculus* and the points he mentions (the absence of the clypeal spines and the marked pointing of the lobes of the terminal segment) confirm the suspicion that he was really dealing with our peculiar *Nirmus* whose hosts are probably various species of *Charadrius*. Whether and how far it varies are yet to be determined.

Gen. *Lipeurus* NITZSCH (1818).

Lipeurus mutabilis PIAGET (1880).

L. mutabilis, PIAGET, Les Pédiculines, p. 324, tab. 27, fig. 1 (1880).

♂, 4 ♀♀. *Fulmarus glacialis*.

Gjanoyri (Strömö), 11./8. 1912. K. SCHREIBER leg.

Like many other tubinarian hosts, the Fulmar Petrel has yielded more than one species of *Lipeurus*. The 5 examples collected by Dr. DAMPF belong to the species typically found in Shetland on this bird. Its name we consider is *Lipeurus mutabilis* PIAGET. We suggest that *L. varius* KELLOGG (New Mallophaga, pt. 1, p. 116, tab. 7, figs. 3, 4, 1896) is the juvenile phase of *L. celer* KELLOGG (l. c., p. 117, tab. 7, figs. 5, 6) and that both are equal to *L. mutabilis* P.

STEPHENS (Syst. Cat., pt. 2, 333) mentions a *L. bilineatus* from the Fulmar and to one familiar with the early stages of *mutabilis* the name is suggestive. Unfortunately *bilineatus* must now be regarded as a *nomen nudum*, as the Hon. N. C. ROTHSCHILD M. A. who kindly made enquiry at our request, informs us that the type is no longer extant. Nor has any description of STEPHENS' insect ever appeared so far as we know. In these circumstances it might seem unnecessary to discuss further the identity of *bilineatus*. But an interesting fact has emerged during the writers investigations. Various considerations pointed to *bilineatus* being probably the normal *Lipeurus* of *Fulmarus glacialis*. PIAGET (Les Pédiculines, p. 324) suggested it is a synonym of his *grandis* (*Thalassidroma pelagica*). We have examined three specimens of *T. pelagica* feather by feather without finding any other *Lipeurus* than DENNY'S *pelagicus* (Monogr. Anopl. Brit., p. 173, tab. 14, fig. 2, 1842) of which PIAGET'S *subangusticeps* (Les Pédiculines, p. 308, tab. 25, fig. 5, 1880) is almost certainly a synonym. We are inclined to doubt therefore of the Storm Petrel is a normal host of *L. grandis* P. and our hesitation is reinforced by the fact that the bird from which PIAGET secured

his types was from a Zoological garden (Rotterdam) under conditions which facilitate "straggling" in a most confusing way. Recently, after having given up all hope of seeing *grandis* from *T. pelagica*, we encountered it in such numbers as to suggest it was in its natural habitat, upon *Stercorarius parasiticus*. A study of this series enabled us to place some immature *Lipeurus* which we had in our collection from *Stercorarius pomarinus*, labelled provisionally "*mutabilis*?" We have now no doubt that these are referable to *L. grandis* P. and that the genus *Stercorarius* supplies some of its normal hosts. *L. mutabilis* and *L. grandis* though very distinct when fully adult are practically inseparable at a younger stage. The narrow black lateral markings of the immature stages of either insect might well suggest the name *L. bilineatus*. If the point has no longer much importance it is interesting to note that a *Lipeurus*, occurring on *Stercorarius* has as its nearest allies forms got on Tubinarian hosts. *L. mutabilis* and *L. grandis* must phylogenetically be extremely closely connected as the structure of head and genitalia shows.

PIAGET's figure of *mutabilis* is unexpectedly disappointing yet we do not think that error is likely to arise through following his description. KELLOGG's figures are excellent.

We should add that *Fulmarus glacialis* is given by KELLOGG as a host of *L. grandis* — the locality being Magellan straits. We shall very gladly examine *Lipeurus* from any species of *Fulmarus*.

The occurrence of *Lipeurus grandis* on *Stercorarius* is suggestive for the systematist. With *grandis* there will require now to be compared *L. laculatus* KELLOGG et CHAPMAN (New Mallophaga, pt. 3, p. 93, tab. 7, fig. 1, 1899) while *Lipeurus modestus* GIEBEL (Ins. Epiz., p. 233, 1874) will also have to be considered. But this cannot be attempted here.

Lipeurus temporalis NITZSCH 1818.

L. temporalis NITZSCH, in: GIEBEL, Ins. Epiz., p. 239 (1874).

2 ♂♂, ♀, 5 imm. *Branta bernicla*, Gjanoyri, 6.9.1912. K. SCHREIBER leg.

The Goose and Duck Lipeuri are much in need of revision. How many species we have it is hard to say and the problem is probably complicated by "straggling". Thus a "bisetose" *Lipeurus* from Domestic goose may be one of three distinct types. Even in

a feral condition the hosts of this group mingle freely so that with the same host before one there is no guarantee that one is dealing with the same parasite that a fellow worker has found elsewhere. Only very careful descriptions or preferably a thorough collation of types can elucidate the present confusion.

We have called these Brent Goose *Lipeurus*, "*temporalis*" because of their general agreement with series of the genus taken on *Mergus serratar* (Shetland etc.) but we have no feeling of satisfaction with this determination. ERIC MJOBERG (in: Ark. Zool., Vol. 6, No. 13, p. 91, 1910) records both *jejunus* N. and *temporalis* N. from *Branta bernicla*.

Subord. Amblycera.

Fam. Liotheidae.

Gen. *Colpocephalum* NITZSCH (1818).

Colpocephalum grandiceps PIAGET (1880).

C. grandiceps, PIAGET, Les Pediculines, p. 558. tab. 46, fig. 7 (1880).

3 ♂♂, 2 ♀♀, 2 imm. *Haematopus ostralegus* (3 expl.).

Langesand, Gjanoyri (Strömnæs) 3., 13., 15./8. 1912. K. SCHREIBER leg.

This like *C. umbrinum* P. is sexually a very distinctly dimorphic form.

Colpocephalum umbrinum PIAGET (1880).

C. umbrinum PIAGET, Les Pédiculines, p. 556, tab. 46, fig. 6 (1880).

11 immature specimens. *Tringa maritima*.

Gjanoyri (Strömö), 15./8. 1912. K. SCHREIBER leg.

These examples are perhaps not strictly determinable but after careful examination we venture to assign them to the above species. *C. umbrinum* — varying slightly in size — seems characteristic of hosts of the genus *Tringa*. We have seen it from *Canutus canutus* (Shetland) and also from *Erotia subarquata* (South Africa) but curiously never on *Arquatella maritima* though we have examined over a score of this bird with some attention.

Colpocephalum sp.

3 examples in all from the same host "Regenpfeifer?" (*Charadrius hiaticula*) as follows:

a) ♀ Gjanoyri, 19./8. 1912.

b) ♀ and imm., ibid., Aug. 1912. K. SCHREIBER leg.

These ♀♀ correspond, we believe, with examples taken in Shetland on the same host.

C. ochraceum NITZSCH is said to occur on *Ch. hiaticula* but we have never felt confident in so determining our material, which is not yet worked out critically. Nor does it seem advisable to venture an opinion on an examination of one sex only.

Gen. *Menopon* NITZSCH (1818).*Menopon crocatum* NITZSCH (1818).

M. crocatum NITZSCH, in: GIEBEL, Ins. Epiz., p. 295 (1874).

— PIAGET, Les Pédiculines, p. 475, tab. 39, fig. 3 (1880).

4 ♂♂, 13 ♀♀, 5 imm. *Haematopus ostralegus* (3 expl.).

Langesand, Gjanoyri, Strömnæs, 3., 13., 15./8. 1912. K. SCHREIBER leg.

♂, 6 ♀♀, 2 imm. *Numenius phaeopus*.

Grönhölm b. Strömnæs (Strömö), 12./8. 1912. K. SCHREIBER leg.

These examples of *Menopon* from whimbrel resemble closely the *Menopon* of the curlew. In general dimensions they agree with *M. crocatum* NITZSCH but in the proportion of the length of the head to that of the thorax they agree rather with *lutescens* NITZSCH.

Menopon gonophaeum NITZSCH (1818).

M. gonophaeum NITZSCH, in: GIEBEL, Ins. Epiz., p. 232, tab. 15, fig. 7 (1874).

♂?, ♀? one specimen barely mature, *Corvus corax varius* (2 expl.)

Gjanoyri, Strömö, 16., 17./9. 1912. K. SCHREIBER leg.

One quite immature example, *Corvus corax varius*.

Naalsö, 18.9. 1912. PETERSEN leg.

This is a broad headed form with abdominal bands which promise to be complete when fully developed. It is not possible really to say much of such scanty material but it seems the same

as the *Menopon* we have from the same host from Shetland. *Menopon gonophaeum* is quite distinct from *M. mesoleucum* N. How it compares with *anathorax* N. (*C. monedula*) and *isosternum* N. (*C. frugilegus*) we cannot say. Our *Menopon* from *C. monedula* are not of the Corvine type but on *C. frugilegus* and *C. corone* a *Menopon* occurs extremely like the species on *C. corax*.

***Menopon mesoleucum* NITZSCH (1818).**

M. mesoleucum NITZSCH, in: GIEBEL, Ins. Epiz., p. 281, tab. 14, figs. 11, 12 (1874).

3 ♂♂, 6 ♀♀, 14 imm. *Corvus cornix*.

Naalsö, 18.9. 1912. PETERSEN leg.

4 ♂♂, ♀, 3 imm. (stragglers.). *Larus fuscus*.

Gjanoyri (Strömö), 5./8. 1912. K. SCHREIBER leg.

***Menopon numerosum* KELLOGG (1896).**

M. numerosum KELLOGG, New Mallophaga, pt. 1, p. 159, tab. 15, fig. 1, (1896).

♀. *Fulmarus glacialis*.

Gjanoyri (Strömö), 11./8. 1912. K. SCHREIBER leg.

The above ♀ apparently belongs to the species we have taken on *Fulmarus glacialis* in Shetland. One would have been glad to see the ♂ also.

PIAGET (Les Pédiculines, p. 499, tab. 41, fig. 1, 1880) describes a *M. brevifimbriatum* from *F. glacialis* but neither text nor figure applies so well to our material as does KELLOGG's account of his *M. numerosum* from Pacific varieties of the same host.

It is noteworthy that the European and Californian Fulmars carry precisely the same *Docophorus*, *Lipeurus* and *Ancistrana*. It will therefore be surprising should their *Menopon* parasites ultimately prove distinct. In spite of apparently irreconcilable differences between the descriptions quoted, we are unwilling to believe that this is the case, especially as *Menopon* is a very generalised type. It is always possible, of course, that PIAGET's types were stragglers on *Fulmarus*.

Menopon troglodyti DENNY (1842).

M. troglodyti DENNY, Monogr. Anopl. Brit., p. 221, tab. 18, fig. 7 (1842).

2 ♂♂, 3 ♀♀. *Troglodytes borealis*.

Gjanoyri, 16./8. 1912. K. SCHREIBER leg.

A number of species of *Menopon* have been described from the smaller passerines and such specimens as we have from these hosts bear a strong general resemblance to one another. The names will probably have to be reduced but we expect *M. troglodytis* DENNY will stand unless it is a synonym for *M. pusillum* N. (*Motacilla alba*). Still we must regard this identification is provisional.

These Faroe examples are adult and very dark in colour. In Shetland we have taken mainly immature specimens and the few adults seen appear to be paler than Dr. DAMPF's captures.

Menopon sp.

2 ♀♀. *Sturnus vulgaris faroensis* (2 expl.).

Gjanoyri (Strömö), 10./8. 1912. SCHREIBER leg.

The starling (*S. vulgaris*) harbours regularly in Britain two species of *Menopon*. The first of these is the unmistakable *M. cuculare* N. which belongs to a well marked group found characteristically on the *Corvidae* and distinguished morphologically by the sudden broadening of the head behind the eye; by the shape of the thorax; the male genitalia and in both sexes by the peculiar 2. abdominal segment whose sternite bears on each side a patch (3—4) of strong spines. The 2. tergite (♀ only) is produced posteriorly as in *M. mesoleucum* etc. In a fresh condition *M. cuculare* N. is tinged all over with yellow.

This well defined *Menopon* appears never to be very common and it is often replaced and sometimes accompanied by its more generalised congener of which Dr. DAMPF's 2 ♀♀ are examples. At present we hesitate to assign it a name. PIAGET (Les Pédiculines, p. 439, tab. 33, fig. 3, 1880) has described a *M. flavescens* from *Sturnus cristatellus* and this species has since been reported from Italy. *M. flavescens* P. seems to us to be similar to *M. cuculare* and to have nothing to do with the insect under discussion.

A conspicuous feature of Dr. DAMPF's ♀♀ and of a series of the same insect in the writers collection is the row of short spines at the posterior margin on each side of the abdominal tergites. Such spines characterise a group of Passerine *Menopon* whose determination should only be attempted as a whole.

Gen. *Ancistrona* WESTWOOD (1874).

Ancistrona gigas PIAGET (1885).

A. gigas PIAGET, Les Pédiculines (Supplément), p. 117, tab. 12, fig. 8 (1885).

2 ♀♀. *Fulmarus glacialis*.

Gjanoyri, Strömö, 11./8. 1912. K. SCHREIBER leg.

This species runs with great rapidity. *Ancistrona* seems to be specially attached to the genus *Procellaria* — sensu lato. Whether it is more than monotypic is doubtful.
